WHAT IS CLAIMED IS:

1. A transparent substrate used for an area light emitting device comprising:

a light incidence surface;

a light exit surface opposite to the light incidence surface; and

a plurality of recesses formed on the light exit surface bulging towards the light incidence surface,

wherein the surfaces of each recess form a shape approximately corresponding to a portion of an oval sphere,

wherein the perimeter of each recess on the light exit surface is approximately circle, and

wherein each recess is separately formed from the other recesses.

2. A transparent substrate used for an area light emitting device according to claim 1, wherein the shortest distance between a recess and its nearest adjacent recess is at least 50μm, and the distance between centers of areas defined by recess perimeters on the light exit surface is at most 200μm.

3. A transparent substrate used for an area light emitting device according to claim 1, wherein each recess is positioned so that the sum of a diameter of an area defined by a recess perimeter on the light exit surface and the shortest distance from the nearest adjacent recess is at least the length of minor axis of the oval sphere and is at most the length of major axis of the oval sphere.

4. A transparent substrate used for an area light emitting device according to claim 1, wherein the recesses are arranged to be approximately hexagonally close-packed or cubic close-packed with respect to the centers of the recess perimeters on the light exit surface.

5. A transparent substrate for an area light emitting device according to claim 1, wherein each recess has a depth which is at most a half the thickness of the transparent substrate and is at most 1.5 folds the diameter of the perimeter on the light exit surface.

6. An area light emitting device which comprises a transparent substrate according to claim 1 and an area light emitting element disposed on the opposite side of the light exit surface with respect to the light incidence surface of the transparent substrate,

wherein a light reflecting member is disposed on the area light emitting element opposite to the transparent substrate or within the area light emitting device to reflect light incident from the transparent substrate back towards the transparent substrate, and

wherein the light emitted from the area light emitting device exits by passing through the transparent substrate.

7. An area light emitting device according to claim 6 wherein the area light emitting element is an organic electroluminescence element or inorganic electroluminescence element.

8. An area light emitting device according to claim 6 wherein a prism sheet is disposed opposite to the light emitting element on the transparent substrate.

9. A liquid crystal display device comprising an area light emitting device according to claim 6 and a liquid crystal display panel disposed in the path of the light emitted from the area light emitting device.

10. A liquid crystal display device according to claim 9 wherein the liquid crystal display panel is positioned relative

to the area light emitting device so that straight lines formed between centers of adjacent pixels on the liquid crystal display panel and straight lines formed between centers of adjacent recess perimeters on the light exit surfaces are displaced from each other when viewed from the display surface of the liquid crystal display panel.

11. A method for forming a transparent substrate which includes a light incidence surface and a light exit surface opposite to the light incidence surface and which is used for an area light emitting device, the method comprising:

sandblasting at least one area of the light exit surface of the transparent substrate to form a plurality of recesses in said at least one area, with the recesses bulged towards the light incidence surfaces,

wherein each recess includes a surface formed in a shape approximately corresponding to a portion of an oval sphere, with each recess having a perimeter on the light exit surface that is approximately circle, and each recess being separately formed from the other recesses.

12. A method for forming a transparent substrate according to claim 11, wherein before said sandblasting, a mask is provided on the light exit surface of the transparent substrate, in areas where recesses are not to be formed.

13. A method for producing recesses in a light exit surface of a transparent substrate, the method comprising:

providing a mask in areas where recesses are not to be provided on the light exit surface of the substrate; and

performing sandblasting to form the recesses on the light exit surface.